

Chronology of Defect / Noncompliance Determination

Provide the chronology of events leading up to the defect decision or test data for the noncompliance decision.

September – December 2021 On September 16, 2021, Ford's Critical Concern Review Group (CCRG) opened an investigation into reports of intermittent trailer brake controller (TBC) function on 2021 – 2022MY F-150 vehicles. Ford had identified customer reports of improperly functioning trailer brake control systems. NHTSA also contacted Ford regarding three VOQs alleging improper trailer brake controller function. Ford personnel inspected two complaint vehicles but could not duplicate the concern and were unable to identify whether the reports related to an issue with the TBC or with the quality of the trailer connection.

Ford obtained parts from additional complaint vehicles for inspection, though inspection of those returned parts found no anomalies relating to this concern. Ford inspected a complaint vehicle in Canada in December 2021. Parts from that complaint vehicle were returned and analyzed, with no anomalies found. Ford also continued to analyze field data and update NHTSA with the status of its investigation.

January – February 2022 Efforts were undertaken with the supplier to duplicate the concern on an exemplar unit. Transport Canada contacted Ford in January regarding reports they had received of inoperative trailer brakes on F-150 vehicles while driving. On February 8, 2022 the supplier reported to Ford that they experienced an improperly functioning TBC while driving an exemplar Super Duty vehicle. Supplier diagnostics identified a potential vulnerability between two instructions within the software where the processing does not complete as intended, resulting in the TBC brake output signal not being properly sent to the trailer while driving.

Further diagnostics found that the software concern identified on the Super Duty vehicle may also be present on the 2021-2022MY F-150 currently under investigation by CCRG. A stop-ship was authorized on February 12, 2022.

As of February 21, 2022, Ford identified 67 reports of improper TBC function potentially related to this concern. The first report occurred on April 5, 2021.

On March 18, 2022, Ford's Field Review Committee reviewed the concern and approved a field action.

Ford is not aware of any reports of accident or injury related to this condition.